

**AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. §1251 et seq.; Act); Hawaii Revised Statutes (HRS) Chapter 342D; and Hawaii Administrative Rules (HAR) Chapters 11-54 and 11-55, Department of Health (DOH), State of Hawaii,

**CITY AND COUNTY OF HONOLULU  
DEPARTMENT OF ENVIRONMENTAL SERVICES**

(hereinafter Permittee),

is authorized to discharge treated wastewater to the receiving waters named Mamala Bay, Pacific Ocean through Outfall Serial No. 001 at Latitude 21°16'47" N and Longitude 158°01'40" W,

from its Honouliuli Wastewater Treatment Plant located at 91-1000 Geiger Road, Ewa Beach, Hawaii, 96706,

in accordance with the general requirements, effluent limitations, monitoring requirements and other conditions set forth herein, and in the DOH "Standard NPDES Permit Conditions" (Version 15) that is available on the DOH, Clean Water Branch (CWB) website at: <http://health.hawaii.gov/cwb/site-map/home/standard-npdes-permit-conditions/>.

All references to Title 40 of the Code of Federal Regulations (CFR) are to regulations that are in effect on July 1, 2018, except as otherwise specified. Unless otherwise specified herein, all terms are defined as provided in the applicable regulations in Title 40 of the CFR.

Failure to comply with any condition, requirement, and/or limitation in this permit is an enforceable violation and this NPDES permit may be terminated. If the Permittee violates HRS Chapter 342D, the Permittee may be subject to penalties of up to \$25,000 per violation per day and up to two (2) years in jail. Falsification of information, including providing information in the NPDES application that does not match what is actually occurring at the project site/facility, may result in criminal penalties for the Permittee and their authorized representative as provided in the Act, Section 309 and HRS Section 342D-35.

This permit, including the Zone of Mixing, will become effective on **October 1, 2020**.

This permit, including the Zone of Mixing, and the authorization to discharge will expire at midnight, **September 30, 2025**.

Signed this **13<sup>th</sup> day of August, 2020**.



---

(For) Director of Health

**FINAL PERMIT  
August 13, 2020**

**TABLE OF CONTENTS**

**PART A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

**PART B. WHOLE-EFFLUENT TOXICITY REQUIREMENTS**

1. Monitoring Frequency
2. Test Species and Methods
3. Chronic WET Permit Limit
4. Quality Assurance
5. Initial Investigation TRE Work Plan
6. Accelerated Toxicity Testing and TRE/TIE Process
7. Reporting of Chronic Toxicity Monitoring Results
8. Permit Reopener for Chronic Toxicity

**PART C. WATER QUALITY CRITERIA**

1. Specific Water Quality Criteria for Recreational Waters
2. Basic Water Quality Criteria Applicable to All Waters

**PART D. ZONE OF INITIAL DILUTION LIMITATIONS AND ZONE OF MIXING LIMITATIONS**

**PART E. RECEIVING WATER MONITORING PROGRAM REQUIREMENTS**

1. Shoreline Water Quality Monitoring
2. Offshore Water Quality Monitoring
3. Offshore Sediment Monitoring
4. Fish Monitoring
5. Coral Reef Survey
6. Annual Receiving Water Monitoring Programs
7. Protocols and Methods

**PART F. WASTEWATER POLLUTION PREVENTION PROGRAM**

**PART G. PRETREATMENT REQUIREMENTS**

**PART H. SLUDGE/BIOSOLIDS REQUIREMENTS**

1. Sludge Use/Disposal Requirements
2. Requirements for Receiving Sludge

**PART I. REPORTING REQUIREMENTS**

1. Effluent Monitoring Program
2. Transmittal and Monitoring Results Reporting Requirements
3. Reporting of Noncompliance, Unanticipated Bypass, or Upset
4. Other Reporting Requirements
5. Types of Sample

**PART J. SPECIAL CONDITIONS**

**PART K. LOCATION AND ZOM, AND RECEIVING WATER STATION MAPS**

**APPENDIX 1 – MONITORING PARAMETERS AND ANALYTICAL METHODS**

**ATTACHMENT: STANDARD NPDES PERMIT CONDITIONS (VERSION 15)**

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning with the effective date of this permit and lasting until the expiration date of this permit, the Permittee is authorized to discharge treated wastewater from Outfall Serial No. 001. The discharge shall be limited and monitored as specified below.

Effluent Characteristics	Discharge Limitations <sup>1</sup>				Monitoring Requirements	
	Average Monthly	Average Weekly	Maximum Daily	Units	Measurement Frequency	Sample Type
Flow	2	2	2	MGD	Continuous/ Estimate <sup>4</sup>	--
Biochemical Oxygen Demand (5-day @ 20 Deg. C) (BOD <sub>5</sub> ) <sup>3</sup>	30	45	2	mg/L	1/Day <sup>4</sup>	24-Hour Composite
	9,508	14,261	2	lbs/day		
	The average monthly percent removal shall not be less than 85 percent					
Total Suspended Solids (TSS) <sup>3</sup>	30	45	2	mg/L	1/Day <sup>4</sup>	24-Hour Composite
	9,508	14,261	2	lbs/day		
	The average monthly percent removal shall not be less than 85 percent					

MGD – Million Gallons per Day

- <sup>1</sup> Compliance with mass-based effluent limitations shall be determined using the following formula:

$$\text{lbs/day} = 8.34 * \text{concentration (mg/L)} * \text{flow (MGD)}$$

- <sup>2</sup> The Permittee shall monitor and report the test results.
- <sup>3</sup> See discussion of the 2010 Consent Decree on page 8 of the Fact Sheet.
- <sup>4</sup> Both influent and effluent measurements shall be taken, as specified in Part A.2 of this permit.

Effluent Characteristics	Discharge Limitations <sup>1</sup>				Monitoring Requirements	
	Average Annual	Average Monthly	Maximum Daily	Units	Measurement Frequency	Sample Type
pH	Not less than 6.0 and not greater than 9.0			standard units	5/Week <sup>2</sup>	Grab
Chronic Toxicity <i>Tripneustes gratilla</i> <sup>3</sup>	--	--	Pass <sup>4</sup>	Pass/Fail	1/Quarter	24-Hour Composite
Chronic Toxicity <i>Ceriodaphnia dubia</i> <sup>3</sup>	--	--	Pass <sup>4</sup>	Pass/Fail	1/Quarter	24-Hour Composite
Chronic Toxicity <i>Atherinops affinis</i> <sup>3</sup>	--	--	Pass <sup>4</sup>	Pass/Fail	1/Quarter	24-Hour Composite
Enterococci	--	17,115 <sup>5</sup>	26,910 <sup>6</sup>	CFU/100 mL	1/Day <sup>7</sup>	Grab <sup>8</sup>
Temperature	9	9	--	°C	1/Week	Grab
Total Oil and Grease	9	9	--	mg/L	2/Week	Grab
Total Petroleum Hydrocarbons	9	9	--	mg/L	2/Week	Grab
Fats, Oils, and Grease	9	9	--	mg/L	2/Week	Calculate <sup>10</sup>
Turbidity	9	9	--	NTU	1/Month	Grab
Remaining Pollutants <sup>11</sup>	9	9	--	µg/L	2/Year	Grab

- <sup>1</sup> Compliance with mass-based effluent limitations shall be determined using the following formula:

$$\text{lbs/day} = 8.34 * \text{concentration (mg/L)} * \text{flow (MGD)}$$

- <sup>2</sup> Both influent and effluent samples shall be taken, as specified in Part A.2 of this permit.

**PART A**  
**PERMIT NO. HI 0020877**  
**Page 5**

- 3 The Permittee shall test one species for the three (3) chronic species (*T. gratilla*, *C. dubia*, and  
4 *A. affinis*) each calendar month such that each species is tested at least once per quarter.  
5 "Pass", as described in Section B.3 of this permit.  
6 Compliance based on the monthly geometric mean.  
7 Effluent limitation expressed as a single sample maximum. The daily maximum effluent limitations  
8 shall not be exceeded in more than ten percent (10%) of samples taken within the same 30-day  
9 interval in which the geometric mean was calculated.  
10 Report enterococci as a geometric mean and as a single sample maximum.  
11 Effluent monitoring shall consist of one grab sample. Enterococci samples shall be analyzed using  
Method 1600, *Enterococci in Water by Membrane Filtration Using membrane-Enterococcus Indoxyl  $\beta$*   
*D Glucoside Agar(mEI)* (EPA 821-R-09-016).  
The Permittee shall monitor and report the parameter results.  
Fats, oils, and grease are equal to the total oil and grease minus total petroleum hydrocarbons.  
The Permittee shall perform semi-annual monitoring, based on a calendar year, on all remaining  
pollutants listed in Appendix 1 of this permit, except those already specified in the table above.  
Effluent analyses for metals shall be reported as total recoverable.
2. For individual discharge parameters monitored in the influent and effluent,  
monitoring shall be conducted on the same day.
  3. All influent and effluent monitoring shall be arranged so that each day of the  
calendar week is represented once per month (i.e., for discharge parameters  
monitoring five (5) days per week or three (3) days per week, or once per two  
(2) months (i.e., for discharge parameters monitored once per week). If the  
Permittee cannot arrange monitoring as prescribed, the Permittee shall provide  
a written explanation of the reasons with the discharge monitoring report.
  4. Effluent monitoring for turbidity shall be conducted on the same day that  
receiving water monitoring for said pollutant is conducted.
  5. Samples taken in compliance with the monitoring requirements in Part A of this  
permit shall be taken at the following locations:
    - a. Influent Monitoring, Monitoring Location INF: All influent samples shall be  
taken:
      - (1) downstream of any additions to the trunk sewer;
      - (2) upstream of any in-plant return flows; and
      - (3) prior to treatment where representative samples of the influent can be  
obtained.
    - b. Effluent Monitoring Location, Outfall Serial No. 001: All effluent samples  
shall be taken:
      - (1) downstream from any additions to the facility after all treatment  
processes; and

- (2) prior to mixing with the receiving waters where representative samples of the final effluent can be obtained

**6. Interim Effluent Limitations for Enterococcus**

- a. The Permittee shall maintain compliance with the following interim effluent limitations for enterococcus at Outfall Serial No. 001. The interim effluent limitations for enterococcus shall be effective from the effective date of this permit until completion of all required tasks identified in the Compliance Schedule for Enterococcus in Part A.6.b., below.

Parameter	Interim Effluent Limitations			Monitoring Requirements	
	Monthly Geometric Mean	Single Sample Maximum	Units	Measurement Frequency	Sample Type
Enterococcus	898,087	1,155,089	CFU/100 mL	1/Day	Grab <sup>1</sup>

<sup>1</sup> Effluent monitoring shall consist of one grab sample. Enterococci samples shall be analyzed using Method 1600, *Enterococci in Water by Membrane Filtration Using membrane-Enterococcus Indoxyl-β-D-Glucoside Agar(mEI)* (EPA 821-R-09-016).

- b. In consideration of the Permittee's separate obligations under the 2010 Consent Decree, the Permittee shall implement the following tasks to comply with the final effluent limitations for enterococcus specified in Part A.1 of this permit. These tasks shall be completed as soon as reasonably possible, but no later than the compliance dates specified below.

**Compliance Schedule for Enterococcus**

Task	Compliance Date
1. The Permittee shall begin 12 months of daily monitoring of existing secondary treatment stream for effluent enterococcus.	January 1, 2019
2. The Permittee shall secure funding to evaluate: (1) effluent enterococcus monitoring data to determine if disinfection is necessary to comply with effluent limitations for enterococcus established in Part A.1 of this permit and (2) reasonable alternatives to comply with the final effluent limitations for enterococcus established in Part A.1 of this permit, if disinfection is determined to be necessary.	June 30, 2020
3. The Permittee shall analyze and evaluate effluent enterococcus monitoring data to determine if disinfection is necessary to comply with effluent limitations for enterococcus established in Part A.1 of this permit. If no disinfection is necessary, the Permittee does not need to proceed with the remaining tasks identified in this schedule. The Permittee shall inform DOH in writing whether or not disinfection is necessary to comply with enterococcus effluent limitations in Part A.1 of this permit.	December 31, 2020

**PART A**  
**PERMIT NO. HI 0020877**  
**Page 7**

<b>Task</b>	<b>Compliance Date</b>
4. If disinfection is determined to be necessary, the Permittee shall identify and evaluate reasonable alternatives to comply with the final effluent limitations for enterococcus established in Part A.1 of this permit to be considered for implementation to comply with final limitations for enterococcus, with consideration of the necessary facility upgrades to secondary treatment required under the 2010 Consent Decree. The Permittee shall submit a report to DOH which summarizes the chosen alternative and all reasonable alternatives evaluated.	December 31, 2022
5. The Permittee shall execute a design contract and issue a notice to proceed with the design of treatment processes needed to comply with the final effluent limitations for enterococcus specified in Part A.1 of this permit.	December 31, 2023
6. The Permittee shall provide a written report on the progress of design.	December 31, 2024
7. The Permittee shall provide a written report on the progress of design.	December 31, 2025
8. The Permittee shall execute a construction contract and issue a notice to proceed with construction of all treatment processes and facilities necessary to comply with the final effluent limitations for enterococcus specified in Part A.1 of this permit.	December 31, 2026
9. The Permittee shall provide a written report on the progress of construction.	December 31, 2027
10. The Permittee shall provide a written report on the progress of construction.	December 31, 2028
11. The Permittee shall complete construction of all treatment processes and facilities necessary to comply with the final effluent limitations for enterococcus specified in Part A.1 of this permit.	December 31, 2029
12. The Permittee shall comply with the final effluent limitations for enterococcus specified in Part A.1 of this permit.	June 30, 2030

- c. If the Permittee fails or refuses to comply with the established compliance schedule, noncompliance shall constitute a violation of this permit for which the DOH may modify, revoke and reissue, or terminate permit coverage or take direct enforcement action.

**B. WHOLE-EFFLUENT TOXICITY REQUIREMENTS**

1. Monitoring Frequency. The Permittee shall conduct monthly chronic toxicity tests on flow weighted 24-hour composite effluent samples in accordance with the procedures outlined below using one of the three test species each calendar month such that each species is tested at least once per quarter. The Permittee shall report each month's result on the Discharge Monitoring Report (DMR) for that month.

For whole effluent toxicity tests using *Tripneustes gratilla*, if the Permittee has unacceptable control performance while conducting the sea urchin sperm/fertilization bioassay during a monitoring period, the Permittee shall document its efforts, communicate all attempts to the DOH, and report all attempts on the DMR for that monitoring period.

2. Test Species and Methods. The Permittee shall conduct chronic toxicity testing on *Tripneustes gratilla*, *Ceriodaphnia dubia*, and *Atherinops affinis* using the test methods described below. For *Tripneustes gratilla*, the Permittee shall follow Quality Assurance procedures as described in the test methods manual *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136,1995).

<b>Test Species</b>	<b>Test Method</b>
<i>Tripneustes gratilla</i>	Hawaiian Collector Urchin, <i>Tripneustes gratilla</i> (Hawa'e) Fertilization Test Method (Adapted by Amy Wagner, EPA Region 9 Laboratory, Richmond, CA from a method developed by George Morrison, EPA, ORD Narragansett, RI and Diane Nacci, Science Applications International Corporation, ORD Narragansett, RI) (EPA/600/R-12/022).
<i>Ceriodaphnia dubia</i>	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/821/R-02/013).
<i>Atherinops affinis</i>	Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms (EPA/600/R-95/136, 1995).

3. Chronic WET Permit Limit. All State waters shall be free from chronic toxicity as measured using the toxicity tests listed in HAR Section 11-54-10, or other methods specified by the DOH. For this discharge, the determination of "Pass" or "Fail" from any one WET chronic toxicity test at the applicable in-stream waste concentration (IWC) using the Test of Significant Toxicity (TST)



approach is described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010). For any one chronic toxicity test, the chronic WET permit limit that must be met is rejection of the null hypothesis ( $H_0$ ):

IWC (percent effluent) mean response  $\leq 0.75 \times$  Control mean response.

For Outfall Serial No. 001, an IWC of 0.48% shall be used.

A test result that rejects this null hypothesis is reported as “Pass” on the DMR form. A test result that does not reject this null hypothesis is reported as “Fail” on the DMR form. To calculate either “Pass” or “Fail”, the Permittee shall follow the instructions in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document*, Appendix A. If a WET test result is reported as “Fail,” then the Permittee shall follow Part B.6 (Accelerated Toxicity Testing and TRE/TIE Process) of this permit.

4. Quality Assurance

- a. Quality assurance measures, instructions, and other recommendations and requirements are found in the EPA chronic test methods manual previously referenced. Additional requirements are specified below.
- b. This discharge is subject to a determination of “Pass” or “Fail” from a single-effluent concentration chronic toxicity test at the IWC (for statistical flowchart and procedures, see *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document*, Appendix A. During Step 6 of Appendix A, the Permittee shall use an alpha value of 0.05 for *Tripneustes gratilla*, *Ceriodaphnia dubia*, and *Atherinops affinis*. The chronic IWC for Outfall Serial No. 001 is 0.48 percent effluent.
- c. Effluent dilution water and control water shall be receiving water or laboratory water, as described in the test methods manual *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995) and *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013). If the dilution water is different from test organism culture water, then a second control using culture water shall also be used.
- d. If organisms are not cultured in-house, then concurrent testing with a reference toxicant shall be conducted. If organisms are cultured inhouse, then monthly reference toxicant testing is sufficient. Reference toxicant

tests and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.).

- e. All multi-concentration reference toxicant test results must be reviewed and reported according to EPA guidance on the evaluation of concentration-response relationships found in *Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing* (40 CFR 136) (EPA/821/B-00/004, 2000).
  - f. If either the reference toxicant or effluent toxicity tests do not meet all test acceptability criteria in the test methods manual, then the Permittee shall re-sample and re-test within 14 calendar days.
  - g. If the discharged effluent is chlorinated, then chlorine shall not be removed from the effluent sample prior to toxicity testing without written approval by the DOH.
5. Initial Investigation TRE Work Plan. Within 90 calendar days of the permit effective date, the Permittee shall prepare and submit to the DOH a copy of its Initial Investigation Toxicity Reduction Evaluation (TRE) Work Plan (1-2 pages) for review. This plan shall include steps the Permittee intends to follow if toxicity is measured above the chronic WET permit limit and shall include the following, at minimum:
- a. A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.
  - b. A description of methods for maximizing in-house treatment system efficiency, good housekeeping practices, and a list of all chemicals used in operations at the facility.
  - c. An indication of who would conduct the Toxicity Identification Evaluation (TIE) if a TIE is necessary (i.e., an in-house expert or outside contractor).
  - d. A flow chart of the workplan steps
6. Accelerated Toxicity Testing and TRE/TIE Process
- a. If the chronic WET permit limitation is exceeded and the source of toxicity is known (e.g., a temporary plant upset), then the Permittee shall conduct one (1) additional toxicity test using the same species and test method. This toxicity test shall begin within 14 calendar days of receipt of a test result exceeding the chronic WET permit limit. If the additional toxicity test

does not exceed the chronic WET permit limitation, then the Permittee may return to the regular testing frequency.

- b. If the chronic WET permit limit is exceeded and the source of toxicity is not known, then the Permittee shall conduct six (6) additional toxicity tests using the same species and test method, approximately every two (2) weeks, over a 12-week period. This testing shall begin within 14 calendar days of receipt of a test result exceeding the chronic WET permit limit. If none of the additional toxicity tests exceed the chronic WET permit limit, then the Permittee may return to the regular testing frequency.
- c. If either of the additional toxicity tests (in paragraph Parts B.6.a or B.6.b) exceeds the chronic WET permit limitation, then, within 14 calendar days of receipt of this test result, the Permittee shall initiate a TRE using, according to the type of treatment facility, EPA manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA/833/B-99/002, 1999) or EPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, 1989). In conjunction, the Permittee shall develop and implement a Detailed TRE Work Plan which shall include the following: further actions undertaken by the Permittee to investigate, identify, and correct the causes of toxicity; actions the Permittee will take to mitigate the effects of the discharge and prevent the recurrence of toxicity; and a schedule for these actions. The Permittee may discontinue accelerated toxicity testing upon the written approval from the DOH.
- d. The Permittee may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and test method and, as guidance, EPA manuals: *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (EPA/600/6-91/003, 1991); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, 1996). Further, the Permittee may be required by the DOH to initiate a TIE as part of a TRE.
- e. Prior to conducting a TIE, the Permittee shall submit a TIE plan to the DOH. The TIE plan, at a minimum shall:
  - (1) Discuss previous TIE efforts and other available data useful in developing TIE procedures.

- (2) Evaluate available operations and effluent data.
- (3) Identify and discuss site-specific considerations for the TIE effort.
- (4) Include a comprehensive quality control program.
- (5) Establish a monitoring program.
- (6) Identify test methods and statistical methods to be used for the TIE effort.
- (7) Identify the TIE procedures for the baseline toxicity tests and TIE manipulations.
- (8) Discuss additional potential analysis that might be helpful in evaluating the causative toxicant(s) or appropriate treatability, such as pollutant scans for toxic effluent.
- (9) Discuss the personnel and their qualifications for the team conducting the TIE results interpretation.
- (10) Include follow-up procedures for use if the TIE is inconclusive.

The Permittee shall incorporate all comments received from the DOH within 14 calendar days of the TIE plan submittal. Within 14 calendar days of the TIE plan submittal, the Permittee shall commence with the TIE.

7. Reporting of Chronic Toxicity Monitoring Results

- a. The Permittee shall report on the DMR for the month in which the toxicity test was conducted: "Pass" or "Fail" (based on the Welch's t-test result), the calculated "percent mean response at IWC", where:

percent mean response at IWC = ((Control mean response – IWC mean response) ÷ Control mean response) × 100,

and to assist in evaluation of the test result, the standard deviations for the IWC mean response and the Control mean response.

- b. The Permittee shall submit a full laboratory report for all toxicity testing as an attachment to the DMR for the month in which the toxicity test was conducted. The laboratory report shall contain: the toxicity test results; the dates of sample collection and initiation of each toxicity test; all results for effluent parameters monitored concurrently with the toxicity test(s); and progress reports on TRE/TIE investigations.

- c. The Permittee shall notify the DOH in writing within five (5) business days of exceedance of the chronic WET permit limitation. This notification shall describe actions the Permittee has taken or will take to investigate, identify, and correct the causes of toxicity; the status of actions required by this permit; and schedule for actions not yet completed; or reason(s) that no action has been taken.
8. Permit Reopener for Chronic Toxicity. In accordance with 40 CFR 122 and 124, this permit may be modified to include new effluent limitations or permit conditions to address chronic toxicity in the effluent or receiving waterbody, as a result of the discharge or to implement new, revised, or newly interpreted water quality standards applicable to chronic toxicity.

**C. WATER QUALITY CRITERIA**

1. Specific Water Quality Criteria for Recreational Waters.

- a. The discharge of treated wastewater through Outfall Serial No. 001 shall not cause the following water quality criteria to be violated in marine recreational water:
  - (1) Enterococcus content shall not exceed a geometric mean of 35 colony forming units per 100 milliliters over any 30-day interval.
  - (2) A Statistical Threshold Value (STV) of 130 per 100 milliliters shall be used for enterococcus. The STV shall not be exceeded by more than ten percent (10%) of samples taken within the same 30-day interval in which the geometric mean is calculated.
  - (3) State waters in which enterococcus content does not exceed the standard shall not be lowered in quality.
  - (4) Raw or inadequately treated sewage, sewage for which the degree of treatment is unknown, or other pollutants of public health significance, as determined by the DOH, shall not be present in natural public swimming, bathing, or wading areas. Warning signs shall be posted where human sewage has been identified as temporarily contributing to the enterococcus count.
- b. Compliance with the water quality criteria listed in Part C.1.a, above, shall be measured at shoreline monitoring stations as described in Part E.1 of this permit.

2. Basic Water Quality Criteria Applicable to All Waters.

- a. The discharge shall comply with applicable water quality standards for receiving waters adopted by the DOH under HAR Chapter 11-54, Water Quality Standards, effective November 15, 2014.
- b. The discharge shall not interfere with the attainment or maintenance of that water quality which assures protection of public water supplies and the protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife and allows recreational activities in and on the water.
- c. The discharge of treated wastewater through Outfall Serial No. 001 shall not cause the following water quality criteria to be violated:

- (1) All State waters shall be free from pollutants in concentrations which exceed the acute standards listed in HAR Section 11-54-4(c)(3). All State waters shall also be free from acute toxicity as measured using the toxicity tests listed in HAR Section 11-54-10, or other methods specified by the DOH.
- (2) All State waters shall be free from pollutants in concentrations which on average during any 24-hour period exceed the chronic standards listed in HAR Section 11-54-4(c)(3). All State waters shall also be free from chronic toxicity as measured using the toxicity tests listed in HAR Section 11-54-10, or other methods specified by the DOH.
- (3) All State waters shall be free from pollutants in concentrations which, on average during any 30-day period, exceed the "fish consumption" standards for non-carcinogens in HAR Section 11-54-4(c)(3). All State waters shall also be free from pollutants in concentrations, which on average during any 12-month period, exceed the "fish consumption" standards for pollutants identified as carcinogens in HAR Section 11-54-4(c)(3).
- (4) All waters shall be free of substances attributable to domestic, industrial, or other controllable sources of pollutants, including:
  - (a) Material that will settle to form objectionable sludge or bottom deposits;
  - (b) Floating debris, oil, grease, scum, or other floating materials;
  - (c) Substances in amounts sufficient to produce taste in the water or detectable off-flavor in the flesh of fish, or in amounts sufficient to produce objectionable color, turbidity or other conditions in the receiving waters;
  - (d) High or low temperatures; biocides; pathogenic organisms; toxic, radioactive, corrosive, or other deleterious substances at levels or in combinations sufficient to be toxic or harmful to human, animal, plant, or aquatic life, or in amounts sufficient to interfere with any beneficial use of the water;
  - (e) Substances or conditions or combinations thereof in concentrations which produce undesirable aquatic life; and
  - (f) Soil particles resulting from erosion on land involved in earthwork, such as the construction of public works; highways; subdivisions;

recreational, commercial, or industrial developments; or the cultivation and management of agricultural lands.



**D. ZONE OF INITIAL DILUTION LIMITATIONS AND ZONE OF MIXING LIMITATIONS**

A ZID and ZOM shall be retained for the assimilation of secondary treated wastewater through Outfall Serial No. 001. The ZID is 407 feet wide and 2,165 feet along the centerline of the diffuser. The ZOM is 2,000 feet wide and 3,700 feet along the centerline of the diffuser and extends vertically downward to the ocean floor.

**E. RECEIVING WATER MONITORING PROGRAM REQUIREMENTS**

The Permittee shall conduct receiving water monitoring at shoreline and offshore stations, as described below.

1. Shoreline Water Quality Monitoring. Shoreline monitoring for enterococci is used to assess compliance with water quality criteria specific for marine recreational waters described in Part C of this permit

The Permittee shall monitor at the following stations:

Station	Latitude	Longitude
HS1	21° 18' 49.1"N	157° 59' 29.1"W
HS2	21° 18' 20.1"N	158° 01' 44.6"W
HS3	21° 18' 12.1"N	158° 02' 42.4"W
HS4	21° 17' 58.9"N	158° 04' 02.5"W

The following water quality parameters shall be sampled:

Parameter	Units	Sample Type	Monitoring Frequency
Enterococci	CFU/100 mL	Surface Grab	5/Month <sup>1</sup>
Visual Observations	--	Visual	5/Month <sup>1,2</sup>

<sup>1</sup> Sampling shall be scheduled to ensure that not more than 5 consecutive days occur between sampling events.

<sup>2</sup> Wind direction and speed, weather, and sea condition shall be recorded for each day of sampling. At each station, unusual color, turbidity, odor, or other physical evidence of sewage shall be noted on the log sheet.

Inability to conduct shoreline monitoring due to inclement weather or hazardous conditions which may endanger the lives of the facility's personnel shall not constitute a violation of this permit. If the Permittee is unable to conduct shoreline monitoring, the rationale shall be reported in the DMR.

Monitoring results shall be reported in a tabular format as an attachment to the monthly DMR and include probable sources and an explanation of any exceedances.

2. Offshore Water Quality Monitoring. Offshore water quality monitoring data are used to assess compliance with State water quality standards. Offshore stations shall be located using a global positioning device which affords a high degree of accuracy and precision that allow reoccupation of the station within  $\pm 6$  meters.

**PART E**  
**PERMIT NO. HI 0020877**  
**Page 19**

The Permittee shall monitor at the following stations:

Station	Latitude	Longitude
HB1 <sup>1</sup>	21° 16' 50.8"N	157° 59' 20.5"W
HB2	21° 17' 00.7"N	158° 01' 21.1"W
HB3	21° 16' 52.0"N	158° 01' 28.9"W
HB4	21° 16' 47.0"N	158° 01' 38.5"W
HB5	21° 16' 55.4"N	158° 01' 32.2"W
HB6	21° 16' 33.1"N	158° 01' 47.8"W
HB7 <sup>1</sup>	21° 15' 33.2"N	158° 03' 13.8"W
HM1	21° 17' 00.8"N	158° 01' 37.4"W
HM2	21° 17' 04.8"N	158° 01' 14.7"W
HM3	21° 16' 45.9"N	158° 01' 24.0"W
HM4	21° 16' 40.7"N	158° 01' 45.1"W
HZ	21° 16' 53.5"N	158° 01' 30.4"W

<sup>1</sup> Control Station

- a. The following water quality parameters shall be sampled at offshore monitoring stations HZ, HB2, HB3, HB4, and HB5 unless otherwise specified:

Parameter	Units	Sample Type	Monitoring Frequency
Visual Observations	--	Visual <sup>1</sup>	1/Quarter
Dissolved Oxygen	mg/L	CDP <sup>2</sup>	1/Quarter
Light Extinction Coefficient	k units	Secchi Disc	1/Quarter
Turbidity	NTU	Grab <sup>3</sup>	1/Quarter

<sup>1</sup> Wind direction and speed, weather, water current, tidal condition, water color, turbidity, odor and flowing material shall be recorded for each day of sampling. The dates and times of sampling shall also be reported.

<sup>2</sup> A continuous depth profile (CDP) is a plot of depth vs. a water quality parameter. Parameter shall be measured on a CDP basis, from within one (1) meter below the surface to within two (2) meters above the bottom at one (1) meter intervals.

<sup>3</sup> Samples shall be collected at each station within one (1) meter below the surface, mid depth, and within two (2) meters above the bottom.

- b. The following water quality parameters shall be sampled at offshore monitoring stations HB1, HB6, HB7, HM1, HM2, HM3 and HM4 unless otherwise specified:

Parameter	Units	Sample Type	Monitoring Frequency
Visual Observations	--	Visual	1/Quarter <sup>1</sup>
Dissolved Oxygen	mg/L	CDP <sup>2</sup>	1/Month
pH	standard units	CDP <sup>2</sup>	1/Month
Temperature	°C	CDP <sup>2</sup>	1/Month
Salinity	ppt	CDP <sup>2</sup>	1/Month
Light Extinction Coefficient	k units	Secchi Disc	1/Quarter
Turbidity	NTU	Grab <sup>3</sup>	1/Month
Total Nitrogen	µg/L	Grab <sup>3</sup>	1/Month

**PART E**  
**PERMIT NO. HI 0020877**  
**Page 20**

Parameter	Units	Sample Type	Monitoring Frequency
Ammonia Nitrogen	µg/L	Grab <sup>3</sup>	1/Month
Total Phosphorus	µg/L	Grab <sup>3</sup>	1/Month
Enterococci	CFU/100 mL	Grab <sup>3</sup>	1/Quarter <sup>4</sup>

- <sup>1</sup> Wind direction and speed, weather, water current, tidal condition, water color, odor and flowing material shall be recorded for each day of sampling. The dates and times of sampling shall also be reported.
- <sup>2</sup> A continuous depth profile (CDP) is a plot of depth vs. a water quality parameter. Parameter shall be measured on a CDP basis, from within one (1) meter below the surface to within two (2) meters above the bottom at one (1) meter intervals.
- <sup>3</sup> Samples shall be collected at each station within one (1) meter below the surface, mid-depth, and within two (2) meters above the bottom.
- <sup>4</sup> Enterococci samples shall be analyzed using Method 1600, *Enterococci in Water by Membrane Filtration Using membrane-Enterococcus Indoxyl-β-D-Glucoside Agar(mEI)* (EPA 821-R-09-016).

Inability to conduct offshore monitoring due to inclement weather or hazardous conditions which may endanger the lives of the facility's personnel shall not constitute a violation of this permit. If the Permittee is unable to conduct shoreline monitoring, the rationale shall be reported in the DMR.

Monitoring results shall be reported in a tabular format as an attachment to the DMR and include probable sources and an explanation of any exceedances.

3. Offshore Sediment Monitoring. The Permittee shall monitor offshore sediments for chemistry and benthic organisms at the stations listed in the table below. The stations correspond to the offshore stations and coordinates in Part E.3. The Permittee may relocate sediment monitoring locations in the event that site conditions preclude the collection of valid samples. When relocating sediment samples, the Permittee shall provide an explanation as to why the relocation was necessary. The Permittee shall include replicates for sediment chemistry and benthic monitoring. The number of samples required at each station is as follows:

Station		Number of Samples at Each Station (including Replicates)	
		Chemistry	Benthic Organisms
Offshore	HZ	3	3
	HB1 <sup>1</sup>	3	3
	HB2	3	3
	HB3	3	3
	HB4	3	3
	HB6	3	3
	HB7 <sup>1</sup>	3	3

<sup>1</sup> Control station

Each station shall be monitored in January, February, March, April, and/or May annually for the parameters indicated in Parts E.3.a and E.3.b of this permit. Monitoring results shall be submitted by June 30<sup>th</sup> of each year. Sediment and biological samples shall be collected and processed in accordance with protocols found in *Quality Assurance and Quality Control (QA/QC) for 301(h) Monitoring Programs: Guidance on Field and Laboratory Methods* (EPA 430/9-86-004 1987).

- a. Sediment Chemistry. Sediment shall be collected using a 0.16 square meter modified van Veen grab sampler or other method yielding similar results. Sediment samples for chemical analyses shall be taken from the top two (2) centimeters of the grab sample and analyzed for the parameters listed below, using methods developed by National Oceanic and Atmospheric Administration's (NOAA) *National Status and Trends Program for Marine Environmental Quality*. For metals, the Permittee shall attempt to achieve target detection limits five times lower than the Effects Range Low (ERL), or the concentration at which ten percent (10%) of the studies show effects. Analytical results shall be reported on a dry weight basis.

Sediment chemistry testing shall be conducted during years one (1) and two (2) of this permit.

Parameter	Units
Grain Size	phi
Total Organic Carbon	percent
Oxidation-reduction potential	EH; mv
Total Nitrogen	mg/kg
Acid volatile sulfides	mg/kg
<i>Metals</i>	
Aluminum	mg/kg
Arsenic	mg/kg
Beryllium	mg/kg
Cadmium	mg/kg
Chromium	mg/kg
Copper	mg/kg
Iron	mg/kg
Lead	mg/kg
Mercury	mg/kg
Nickel	mg/kg
Selenium	mg/kg
Silver	mg/kg

<b>Parameter</b>	<b>Units</b>
Zinc	mg/kg
<i>DDTs</i>	
4,4'-DDT	µg/kg
4,4'-DDD	µg/kg
4,4'-DDE	µg/kg
<i>Chlorinated Pesticides other than DDT</i>	
Aldrin	µg/kg
Alpha-chlordane	µg/kg
Dieldrin	µg/kg
Endrin	µg/kg
Heptachlor	µg/kg
Heptachlor epoxide	µg/kg
Hexachlorobenzene	µg/kg
Lindane (gamma-BHC)	µg/kg
Mirex	µg/kg
Trans-Nonachlor	µg/kg
<i>PCBs</i>	
PCB Congeners <sup>1</sup>	µg/kg
<i>Polycyclic Aromatic Hydrocarbons (PAHs)</i>	
Acenaphthene	µg/kg
Anthracene	µg/kg
Benz(a)anthracene	µg/kg
Benzo(a)pyrene	µg/kg
Benzo(b)fluoranthene	µg/kg
Benzo(e)pyrene	µg/kg
Benzo(g,h,i)perylene	µg/kg
Benzo(k)fluoranthene	µg/kg
Biphenyl	µg/kg
Chrysene	µg/kg
Dibenzo(a,h)anthracene	µg/kg
2,6-dimethylnaphthalene	µg/kg
Fluoranthene	µg/kg
C <sub>1</sub> -Fluoranthene/Pyrenes	µg/kg
Fluorene	µg/kg
Indeno(1,2,3-c,d)pyrene	µg/kg
1-methylphenanthrene	µg/kg
Naphthalene	µg/kg
Perylene	µg/kg

Parameter	Units
Phenanthrene	µg/kg
Pyrene	µg/kg
2,3,5-trimethylnaphthalene	µg/kg

<sup>1</sup> PCB congeners include PCB Nos. 8, 18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 195, 201, 206, and 209.

- b. Benthic Infauna Analyses. Sediment shall be collected using a 0.16 square meters modified van Veen grab sampler. A 7.6 centimeter diameter subsample, to a depth of five (5) centimeters, shall be taken from each grab and sieved for benthic organisms, using a 0.5 millimeter mesh screen. Sample handling and preservation procedures should follow those outlined in *Procedures for Handling and Chemical Analysis of Sediment and Water Samples* (EPA/CE-81-1).

All organisms retained on the sieve shall be counted and identified to the lowest taxon possible. Analyses of community parameters shall include, but not be limited to, the following: number of species, number of individuals per species, number of species per 0.1 square meter, total number of species per station, and total numerical abundance.

Community parameters and statistical analyses shall be presented, along with the data and graphical displays, to illustrate benthic community changes. Statistical analyses should include, but not be limited to, mean, standard deviation, and 95 percent (95%) confidence interval; multivariate analyses, including cluster analysis, ordination, and regression, may also be conducted. Additional analyses shall be conducted, as appropriate, to elucidate spatial and temporal trends in the data.

4. Fish Monitoring. The Permittee shall conduct chemical analyses of fish tissue at three (3) offshore stations identified as follows. Each station shall be sampled annually in January, February, March, April, and/or May by hook-and-line or by setting baited lines or traps. Monitoring results shall be submitted by June 30<sup>th</sup> of each year.

Station	Location	Latitude	Longitude
Outfall-001	In the immediate vicinity of the outfall, centered on the given coordinates	21°17'00"N	158°01'50"W
FR1-B	55-60' of water	21°17'25.6"N	158°06'57.3"W
FR2-B	100' of water	21°19'37.5"N	158°08'29.4"W

Fish shall be identified to the lowest taxon possible. Analyses of fish parameters shall include: number of individuals per species, standard length, and wet weight (grams). Abnormalities and disease symptoms shall be recorded and itemized (e.g., fin erosion, internal and external lesions, tumors); color photographs showing abnormalities of affected fish may be taken and submitted as part of the annual report. Until more appropriate and precise means become available, fish catch statistics from the State of Hawaii, Division of Aquatic Resources, shall be reviewed on an annual basis to detect changes in fish abundance and distribution in the vicinity of the facility ocean outfall. A summary and findings of this review shall be reported in the annual report.

During year one (1) of this permit, the Permittee shall select two (2) target fish species for chemical analyses of muscle tissue; these species shall continue to be analyzed in years two (2) through five (5) of this permit. The two (2) fish species shall be somewhat sedentary (e.g., bridled triggerfish, taape, opelu, akule, menpachi) and representative of fish caught by recreational and commercial fishermen near the facility's outfall. To minimize multiple source uncertainties, migratory pelagic species which feed over large areas (e.g., many kilometers) shall not be selected. For selected species, chemical analyses shall be performed annually on a composite sample of standardized muscle tissue collected from at least three individuals. Chemical analyses shall be performed for pollutants specified in the table below. After the third year of testing, the EPA and DOH may reduce the number of congeners tested to include only those congeners detected in samples tested during years one (1) through three (3) of this permit.

<b>Parameter</b>	<b>Units</b>
Total Lipid	percent
<i>Metals</i>	
Arsenic	mg/kg
Mercury	mg/kg
<i>DDTs</i>	
4,4'-DDT	µg/kg
4,4'-DDD	µg/kg
4,4'-DDE	µg/kg
<i>Chlorinated Pesticides other than DDT</i>	
Aldrin	µg/kg
Alpha-chlordane	µg/kg
Dieldrin	µg/kg
Endrin	µg/kg



<b>Parameter</b>	<b>Units</b>
Heptachlor	µg/kg
Heptachlor epoxide	µg/kg
Hexachlorobenzene	µg/kg
Lindane (gamma-BHC)	µg/kg
Mirex	µg/kg
Trans-Nonachlor	µg/kg
<i>PCBs</i>	
PCB Congeners <sup>1</sup>	µg/kg
<i>Polycyclic Aromatic Hydrocarbons (PAHs)</i>	
Acenaphthene	µg/kg
Anthracene	µg/kg
Benz(a)anthracene	µg/kg
Benzo(a)pyrene	µg/kg
Benzo(b)fluoranthene	µg/kg
Benzo(e)pyrene	µg/kg
Benzo(g,h,i)perylene	µg/kg
Benzo(k)fluoranthene	µg/kg
Biphenyl	µg/kg
Chrysene	µg/kg
Dibenzo(a,h)anthracene	µg/kg
2,6-dimethylnaphthalene	µg/kg
Fluoranthene	µg/kg
C <sub>1</sub> -Fluoranthene/Pyrenes	µg/kg
Fluorene	µg/kg
Indeno(1,2,3-c,d)pyrene	µg/kg
1-methylphenanthrene	µg/kg
Naphthalene	µg/kg
Perylene	µg/kg
Phenanthrene	µg/kg
Pyrene	µg/kg
2,3,5-trimethylnaphthalene	µg/kg

<sup>1</sup> PCB congeners include PCB Nos. 8, 18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 195, 201, 206, and 209.

5. Coral Reef Survey. Within five (5) years of the effective date of this permit, the Permittee shall conduct an assessment of the Honouliuli wastewater discharge on coral communities in the Barbers Point area. This assessment

of changes on living coral coverage shall also include a study of reef fishes. The study shall compare the results of the assessment to historic results and discuss any notable changes in the coral and fish communities.

Within six (6) months of the effective date of this permit, the Permittee shall submit a field study design for approval by DOH and EPA to assess the impacts of the discharge on the coral reefs in the Barbers Point area. This design shall include provisions for mapping the location and extent of the coral reefs, particularly those reefs inshore of the discharge site in 30 to 60 feet of water. Guidance for such surveys is provided in EPA's, *Design of 301(h) Monitoring Programs for Municipal Wastewater Discharges to Marine Waters*, November 1982. In addition, the Permittee shall consider EPA's *Ecological Impacts of Sewage Discharges on Coral Reef Communities*, September 1983 for additional information.

The Permittee shall incorporate any DOH and EPA comments into the field study design received within two (2) years of the effective date of this permit. The Permittee shall implement the field study within four (4) years of the effective date of this permit and submit a final report to DOH within five (5) years of the effective date of this permit.

6. Annual Receiving Water Monitoring Programs. The Permittee shall submit an annual receiving water monitoring report by June 30<sup>th</sup> of each year. The annual receiving water monitoring reports shall summarize and discuss monitoring results for the previous year. Reports shall include, at minimum:
  - a. A description of climatic and receiving water characteristics at the time of sampling (weather observations, floating debris, discoloration, wind speed and direction, swell or wave action, time of sampling, tide height, etc.).
  - b. A description of sampling stations, including differences unique to each station (e.g., station location, sediment grain size, distribution of bottom sediment, rocks, and shell litter, calcareous worm tubes, etc.). This ocean bottom information shall be recorded at least once per calendar year at the permit designated stations.
  - c. A record of the individual(s) performing sampling or measurements. A description of the sample collection and preservation procedures used in the survey shall be included in the report.
  - d. A description of methods used for laboratory analyses. Variations in procedure may be acceptable, but any such changes shall be reported

to the EPA and DOH, before implementation. All such variations must be reported with the analytical results.

- e. An in-depth discussion of monitoring results. All tabulations and computations shall be explained.

- 7. Protocols and Methods. The following protocols and methods shall be used for sample collection and analyses:

<b>Protocols and Methods for Sample Collection and Analyses</b>	
Water quality samples (collection and process); sediment and biological samples	<i>Quality Assurance and Quality Control (QA/QC) for 301(h) Monitoring Programs: Guidance on Field and Laboratory Methods</i> (EPA 430/9-86-004, 1987)
Sediment samples handling	<i>Procedures for Handling and Chemical Analysis of Sediment and Water Samples</i> (EPA/CE-81-1, 1981)
Sediment Analysis	<i>NOAA's National Status Trends Program for Marine Environmental Quality</i>  <i>Methods for the Determination of Metals in Environmental Samples</i>  <i>Test Methods for Evaluating Solid Waste, SW-846, Method 8270</i>
Benthic community structure analysis	<i>Recommended Biological Indices for 301(h) Monitoring Programs</i> (EPA 430/9-86-002, 1987)
Fish tissue analysis	<i>Bioaccumulation Monitoring Guidance: (4) Analytical Methods for USEPA Priority Pollutants and 301(h) Pesticides in Tissues from Estuarine and Marine Organisms</i> (Tetra Tech, 1986)  <i>NOAA's National Status and Trends Program for Marine Environmental Quality</i>  <i>Methods for the Determination of Metals in Environmental Samples</i>  <i>Test Methods for Evaluating Solid Waste, SW-846</i>

**F. WASTEWATER POLLUTION PREVENTION PROGRAM**

The Permittee shall submit an annual report summarizing critical parameters which impact the operations of the facility to the DOH by June 30<sup>th</sup> of each year, unless otherwise instructed by the DOH. The report shall include, at a minimum, an evaluation of critical parameters, including the following:

1. Flow;
2. BOD<sub>5</sub> loading;
3. TSS loading;
4. Toxic pollutants or impacts of septic wastes;
5. Growth potential of the service area;
6. Impact of new regulations;
7. Bypasses and overflows;
8. Effectiveness and condition of the collection system; and
9. Treatment capacity based on additional information.

**G. PRETREATMENT REQUIREMENTS**

1. The Permittee shall be responsible and liable for the performance of all Control Authority pretreatment requirements contained in 40 CFR 403, including any subsequent regulatory revisions. Where 40 CFR 403 or subsequent revisions place mandatory actions upon the Permittee as Control Authority but do not specify a timetable for completion of the actions, the Permittee shall complete the actions within six (6) months from the effective date of this permit or the effective date of the 40 CFR 403 revisions, whichever comes later. For violations of pretreatment requirements, the Permittee shall be subject to enforcement actions, penalties, fines, and other remedies by the EPA or other appropriate parties, as provided in the Act. The DOH and EPA may initiate enforcement action against a nondomestic user for noncompliance with applicable standards and requirements, as provided in the Act.
2. The Permittee shall enforce the requirements promulgated under Sections 307(b), 307(c), 307(d), and 402(b) of the Act with timely, appropriate, and effective enforcement actions. The Permittee shall cause non-domestic users subject to the federal categorical standards to achieve compliance no later than the date specified in those requirements or, in the case of a new non-domestic user, upon commencement of the discharge.
3. The Permittee shall perform the pretreatment functions as required in 40 CFR 403 including, but not limited to:
  - a. Confirming it has the necessary legal authorities to fully implement the pretreatment regulations as provided in 40 CFR 403.8(f)(1);
  - b. Enforcing the national pretreatment standards for prohibited discharges and categorical standards as provided in 40 CFR 403.5 and 403.6, respectively;
  - c. Implement the pragmatic procedures as provided in 40 CFR 403.8(f)(2); and
  - d. Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR 403.8(f)(3).
4. The Permittee shall comply with the urban area pretreatment requirements under Section 301(h) of the Act and the implementing requirements in 40 CFR 125. The Permittee's actions to comply shall include the following:
  - a. During each calendar year, maintaining a rate of significant noncompliance, as defined in 40 CFR 403.8(f)(2)(vii), for significant

industrial users (SIUs) of no more than 15 percent (15%) of the total number of SIUs.

The 15 percent (15%) noncompliance criteria includes only SIUs that are in significant noncompliance and which have not received a second or higher level formal enforcement action from the Permittee, in accordance with the Permittee's Enforcement Response Plan. A second level enforcement action is an Administrative Notice and Order to achieve timely compliance.

Part G.4.d of this permit contains a schedule for evaluating local limits. As a consequence of any new local limits, some SIUs may need time to come into compliance with these new limits. In any such cases, the Permittee shall issue a Compliance Findings of Violation and Order. The Order shall contain a schedule for achieving compliance with the new local limits. SIUs receiving such Orders will not be included in the 15 percent (15%) noncompliance criteria.

- b. Providing the annual analysis regarding local limits required in 40 CFR 125.65(c)(1)(iii).
- c. Evaluating local limits and developing any needed local limits as applicable pretreatment requirements, in accordance with 40 CFR 125.65. The local limits evaluation shall include, but is not limited to:
  - (1) Identifying pollutants of concern. This evaluation shall address each toxic pollutant introduced by an industrial permittee as required under 40 CFR 125.65;
  - (2) Characterizing industrial, commercial, and residential toxic pollutant loadings to the treatment plant;
  - (3) Developing allowable headworks loadings and an allocation strategy for pollutants requiring local limits; and
  - (4) Developing narrative or numeric local limits when technically justified.
- d. The Permittee shall comply with Part G.4.c of this permit according to the following schedule:
  - (1) Submit an interim progress report to the DOH and EPA six (6) months after the permit effective date;
  - (2) Submit a local limits development report to the DOH and EPA 12 months after the permit effective date; and

- (3) Complete the reissuance of any SIU permits necessary to implement local limits within six (6) months after local limits approval by the DOH and EPA.
- e. Reports required in Parts G.4.d.(1) and (2) shall be submitted to the following agencies:
  - (1) DOH-CWB using the CWB Compliance Submittal Form for Individual NPDES Permits and Notice of General Permit Coverages (NGPCs) via the e-Permitting Portal in accordance with Part I.2.f.(1) of this permit.
  - (2) EPA Regional Pretreatment Coordinator (WTR-5) via e-mail: [R9Pretreatment@epa.gov](mailto:R9Pretreatment@epa.gov).
- 5. The Permittee shall update and resubmit the BMP-based program for controlling animal and vegetable oil and grease within 180 calendar days of the effective date of this permit.
- 6. The Permittee shall submit annually to the DOH and EPA a report describing its pretreatment activities over the previous year. In the event that the Permittee is not in compliance with any conditions or requirements of this permit, then the Permittee shall also include the reasons for noncompliance and state how and when the Permittee shall comply with such conditions and requirements. This annual report shall cover operations from January 1 through December 31 and is due on March 31 of the following year. The report shall contain, but not be limited to, the following information:
  - a. A summary of analytical results from representative, flow proportioned, 24-hour composite sampling of the facility's influent and effluent for those pollutants the EPA has identified under Section 307(a) of the Act which are known or suspected to be discharged by nondomestic users. This will consist of wastewater sampling and analysis in accordance with the minimum frequency of analysis stated in Part A of this permit. The Permittee is not required to sample and analyze for asbestos. Sludge monitoring is covered under Part H of this permit. The Permittee shall also provide any influent or effluent monitoring data for nonpriority pollutants which the Permittee believes may be causing or contributing to interference or pass through. Sampling and analysis shall be performed with the techniques prescribed in 40 CFR 136;
  - b. A discussion of upset, interference, or pass through incidents, if any, at the treatment plant which the Permittee knows or suspects were caused by non-domestic users of the collection system. The discussion shall include the reasons why the incidents occurred, the corrective actions taken, and,

if known, the name and address of the nondomestic user(s) responsible. The discussion shall also include a review of the applicable pollutant limitations to determine whether any additional limitations, or changes to existing requirements, may be necessary to prevent interference or pass through;

- c. An updated list of the Permittee's SIUs including their names and addresses, and a list of deletions, additions, and SIU name changes keyed to the previously submitted list. The Permittee shall provide a brief explanation for each change. The list shall identify the SIUs subject to federal categorical standards by specifying which set(s) of standards are applicable to the SIU. The list shall also indicate which SIUs are subject to local limitations;
- d. The Permittee shall characterize the compliance status of each SIU by providing a list or table which includes the following information
  - (1) Name of the SIU;
  - (2) Category, if subject to federal categorical standards;
  - (3) The type of wastewater treatment or control processes in place;
  - (4) The number of samples taken by the Permittee during the year;
  - (5) The number of samples taken by the SIU during the year;
  - (6) For an SIU subject to discharge requirements for total toxic organics, whether all required certifications were provided;
  - (7) A list of the standards violated during the year. Identify whether the violations were for categorical standards or local limits;
  - (8) Whether the facility is in significant non-compliance as defined in 40 CFR 403.8(f)(2)(vii) at any time during the year; and
  - (9) A summary of enforcement or other actions taken during the year to return the SIU to compliance. Describe the type of action, final compliance date, and the amount of fines and penalties collected, if any. Describe any proposed actions for bringing the SIU into compliance.
- e. A brief description of any programs the Permittee implements to reduce pollutants from non-domestic users that are not classified as SIUs;



- f. A brief description of any significant changes in operating the pretreatment program which differ from the previous year including, but not limited to, changes concerning the program's administrative structure, local limits, monitoring program or monitoring frequencies, legal authority, enforcement policy, funding levels, or staffing levels;
- g. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases; and,
- h. A summary of activities to involve and inform the public of the program including a copy of the newspaper notice, if any, required by 40 CFR 403.8(f)(2)(viii).
- i. Annual reports shall be submitted to the following agencies:
  - (1) DOH-CWB using the CWB Compliance Submittal Form for Individual NPDES Permits and Notice of General Permit Coverages (NGPCs) via the e-Permitting Portal in accordance with Part I.2.f.(1) of this permit.
  - (2) EPA Regional Pretreatment Coordinator (WTR-5) via e-mail: [R9Pretreatment@epa.gov](mailto:R9Pretreatment@epa.gov).

## **H. SLUDGE/BIOSOLIDS REQUIREMENTS**

### **1. Sludge Use/Disposal Requirements.**

#### **a. General Conditions and Requirements.**

##### **(1) Acceptable Sludge Use/Disposal Practices.**

- (a) The Permittee shall dispose of all sludge generated at the facility at a municipal solid waste landfill, at a sludge surface disposal site, by land application, or by transferring the sludge to another party for further treatment, use, or disposal in accordance with all applicable portions of 40 CFR 257, 258, and 503 and HAR Chapters 11-58.1 and 11-62.
- (b) Storage of sludge for over two (2) years from the time it is generated shall be considered to be surface disposal. The storage site shall meet all the requirements of a surface disposal site under 40 CFR 503 Subpart C and HAR Chapters 11-58.1 and 11-62. If the Permittee desires to store sludge for longer periods of time prior to final disposal, the Permittee shall submit a written request to the EPA Regional Sludge Coordinator and DOH containing the information required under 40 CFR 503.20(b).
- (c) The Permittee shall dispose of sludge containing more than 50 mg/kg of PCBs in accordance with 40 CFR 761.
- (d) If the Permittee desires to dispose of sludge using a method not listed above, the Permittee shall submit a request for permit modification to EPA Regional Sludge Coordinator and DOH 180 calendar days prior to the commencement of the alternate disposal practice.

##### **(2) Duty to Mitigate. The Permittee shall be responsible for ensuring the following:**

- (a) All sludge produced at its facility is used/disposed of in accordance with 40 CFR 257, 258, and 503, and HAR Chapters 11-58.1 and 11-62, whether the Permittee uses/disposes of the sludge itself or transfers it to another party for further treatment, use, or disposal.
- (b) Subsequent preparers, appliers, or disposers of the sludge are informed of the requirements under 40 CFR 257, 258, and 503, and HAR Chapters 11-58.1 and 11-62.

- (c) Sludge is not allowed to enter State waters, or to contaminate an underground drinking water source.
- (d) Sludge treatment, storage, use, and disposal do not create a public nuisance.
- (e) Haulers who ship non-Class A sludge off-site for additional treatment, use, or disposal take all necessary measures to keep sludge contained.

The Permittee shall take all reasonable steps to prevent or minimize any sludge use or disposal which has a likelihood of adversely affecting human health or the environment.

**(3) Other Conditions**

- (a) The DOH may promptly modify or revoke and reissue this permit to incorporate any applicable standard for sewage sludge use or disposal promulgated under the Act Section 405(d), or adopted under HRS Chapter 342D or HAR Chapter 11-62, if the standard is more stringent than the standard in this permit or covers a pollutant or practice not covered in this permit.
- (b) The sludge requirements in this Part are supplemental to the other conditions of this permit. In the event of a conflict, those requirements more protective of the environment shall apply.
- (c) The requirements in 40 CFR 503 are enforceable by the EPA independently of being included in this permit.

**b. Sludge Limitations and Monitoring Requirements.**

- (1) Sludge shall be limited and monitored by the Permittee as specified below:

**(a) Sludge Disposed of in Municipal Solid Waste Landfills**

<b>Monitoring Parameter/Test Procedures</b>	<b>Limitation</b>	<b>Monitoring Frequency</b>
Paint Filter Test (EPA Method 9095B)	No "Free Liquids" <sup>1</sup>	1/Year
Toxicity Characteristic Leaching Procedure (TCLP) Test <sup>2</sup>	<sup>2</sup>	1/Year
Priority Pollutants <sup>3</sup>	N/A	1/Year <sup>4</sup>

N/A - Not Applicable

<sup>1</sup> "Free Liquids" as defined in EPA Method 9095.

<sup>2</sup> The parameters to be tested by the TCLP test and their limitations are specified in 40 CFR 261.24, Table 1 - Maximum Concentration of Contaminants for the Toxicity Characteristic.

**PART H**  
**PERMIT NO. HI 0020877**  
**Page 36**

- <sup>3</sup> Priority pollutants are listed under the Act Section 307(a).  
<sup>4</sup> The Permittee shall test for priority pollutants more frequently if required under the pretreatment program.

(b) Sludge Disposed of in Surface Disposal Sites (Sludge-only Landfill or Disposal on Land Not for the Purpose of Improving Plant Growth)

Parameter	Limitation (mg/kg)							Monitoring Frequency
	0<25 m	25<50 m	50<75 m	75<100 m	100<125 m	125<150 m	>150 m	
Arsenic <sup>1</sup>	30	34	39	46	53	62	73	<sup>2</sup>
Chromium <sup>1</sup>	200	220	260	300	360	450	600	<sup>2</sup>
Nickel <sup>1</sup>	210	240	270	320	390	420	420	<sup>2</sup>
TCLP Test <sup>3</sup>	<sup>3</sup>							1/Year
Priority Pollutants <sup>4</sup>	N/A							1/Year <sup>5</sup>

m - Meter

mg/kg - milligrams per kilogram

N/A - Not Applicable

- <sup>1</sup> The Permittee shall monitor for this parameter only if sludge is disposed of in a unit with no liner and leachate system. Limitations are based on the distance (meters) from the active sludge unit boundary to the nearest property line.  
<sup>2</sup> Monitoring frequency shall be determined by the following table:

Annual Sludge Production, Dry Weight (Metric Tons/Year)	Monitoring Frequency
0 < 290	1/Year (November)
290 < 1,500	1/Quarter (Feb/May/Aug/Dec)
1,500 < 15,000	6/Year (Feb/Apr/Jun/Aug/Oct/Dec)
>15,000	1/Month

- <sup>3</sup> The parameters to be tested by the TCLP test and their limitations are specified in 40 CFR 261.24, Table 1 - Maximum Concentration of Contaminants for the Toxicity Characteristic.  
<sup>4</sup> Priority pollutants are listed under the Act Section 307(a).  
<sup>5</sup> The Permittee shall test for priority pollutants more frequently if required under the pretreatment program.

- (2) The Permittee shall develop a representative sampling plan for monitoring toxics reduction, including the number and location of sampling points.

- (a) If sludge generated at the facility is land applied or disposed at a surface disposal site, the sampling plan shall also include pathogens and vector attraction reduction monitoring.
  - (b) If pathogen reduction is determined by time and temperature, the plan shall be designed to determine temperatures throughout the batch being treated.
  - (c) If windrow composting is used, temperature shall be measured at least once for each 150 feet of windrow and include measurements at depths of 12 to 24 inches below the surface.
- c. Requirements for Sludge Disposed of in Municipal Solid Waste Landfill.  
The Permittee shall dispose of sludge in municipal solid waste landfills that meet the requirements of 40 CFR 258 and HAR Chapter 11-58.1.
- d. Requirements for Sludge Disposed of in Surface Disposal Sites (Sludge-only Landfill or Disposal on Land Not for the Purpose of Improving Plant Growth).
  - (1) Sludge that is disposed of in a sludge-only landfill shall meet the general requirements, pollutant limits (for surface disposal sites without liners and leachate systems), management practices, and operational standards in 40 CFR 503 Subpart C and additional pollutant limits requested by the DOH.
  - (2) The Permittee shall have a qualified groundwater scientist develop a groundwater monitoring program for the surface disposal site or certify that the placement of sludge on the site will not cause aquifer contamination.
- e. Requirements for Sludge that is Land-Applied (Added to Soil for the Purpose of Improving Plant Growth). The Permittee shall obtain and comply with the Wastewater Management Individual Permit, issued by the DOH, Wastewater Branch.
- f. Notification Requirements.
  - (1) If sludge other than exceptional quality sludge is shipped to another state or to Indian lands, the Permittee shall notify the permitting authorities in the receiving state or Indian land (the EPA Regional Office for that area and the State or Indian authorities) 60 calendar days prior to shipment.

- (2) The Permittee shall notify the EPA Regional Sludge Coordinator and the DOH of any non-compliance that may seriously endanger public health or the environment within 24 hours after becoming aware of the non-compliance. A written non-compliance report shall be submitted, postmarked, or faxed within five (5) working days after the Permittee becomes aware of the non-compliance.
  - (3) The Permittee shall report all other instances of non-compliance not reported under Part H.1.f.(2) at the time DMRs are submitted as required by Part I.1 of this permit.
- g. Annual Report. By February 19<sup>th</sup> of each year, the Permittee shall submit an annual report on sludge management activities during the previous calendar year to the EPA Regional Sludge Coordinator and the DOH. The report shall provide the following information:
- (1) Total amount of sludge generated that year and a breakdown of the usage/disposal methods employed (in dry weight, metric tons).
  - (2) Results of all monitoring required by Part H.1.b.
  - (3) If sludge was disposed of in a municipal solid waste landfill, then the Permittee shall include the following certification statement:  
  
**"I certify under the penalty of law, that the paint filter test and toxicity characteristic leaching procedure test requirements have been met, and that vector attraction reduction requirements have been met by the municipal solid waste landfill. This determination has been made under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information used to determine that the necessary requirements have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."**
  - (4) If sludge was disposed of in a surface disposal site, the following information shall be included:
    - (a) Requirements specified in 40 CFR 503.27.
    - (b) Name and mailing address of the surface disposal operator if different from the Permittee.
    - (c) Location (street address and latitude and longitude) of the surface disposal site.

- (d) Results of groundwater monitoring, or a copy of a certification by a groundwater scientist (including the scientist's name, title, and phone number) that the placement of sludge at the surface disposal site will not cause aquifer contamination.
- (5) If sludge was land-applied, the following information shall be included:
  - (a) Requirements specified in 40 CFR 503.17(a) for all facilities preparing sludge for land application or reference to that facility's report, if submitted to EPA separately.
  - (b) Names and addresses of all facilities receiving the non-exceptional quality sludge, including land appliers and those facilities providing further treatment/blending prior to land application.
  - (c) Location of land application sites of non-exceptional quality sludge (street address, latitude and longitude) and sizes of parcels.
  - (d) Crops grown, agronomic rate for the crops grown, and certification by the land appliers of non-exceptional quality sludge that the sludge was applied at a rate not exceeding the agronomic rate determined for each crop.
  - (e) Copies of other certification statements by land appliers of non-exceptional quality sludge.
- (6) If sludge was stored, the following information shall also be included:
  - (a) Age of stored sludge.
  - (b) Name and mailing address of operator of storage site if different from the Permittee.
  - (c) Location of stored sludge (street address, latitude and longitude).
- (7) If sludge was disposed using other methods, descriptions of the methods employed and the locations (street address, latitude and longitude) of the usage/disposal sites shall be included.
- (8) Annual reports shall be submitted to:
  - (a) DOH-CWB using the CWB Compliance Submittal Form for Individual NPDES Permits and Notice of General Permit

Coverages (NGPCs) via the e-Permitting Portal in accordance with Part I.2.f.(1), unless otherwise specified by DOH;

- (b) EPA using EPA's NPDES Electronic Reporting Tool ("NeT") for biosolids, which went into effect December 21, 2016, unless otherwise specified by DOH;
- (c) DOH, Wastewater Branch at the following address:

Wastewater Sludge Program Manager  
Wastewater Branch  
Environmental Management Division  
Department of Health  
2827 Waimano Home Road, Room 207  
Pearl City, HI 96782

2. Requirements for Receiving Sludge.

- a. Approval. Upon written request by the Permittee and approval by the DOH, the Permittee may transfer sludge hauled from the Permittee's other wastewater treatment plants or third parties (private and non-Permittee wastewater facilities) directly to the facility's solids handling processes through a sludge receiving station. The sludge receiving station shall be equipped to record the source and amount of sludge transferred to the solids handling processes.

The Permittee shall accept sludge from a third party only when:

- (1) The conditions of this permit are met;
  - (2) The third party provides a sludge profile (e.g., treatment at the third party facility, priority pollutant and TCLP test results) that is representative of the sludge that is hauled to the plant for Permittee's review and approval;
  - (3) The design sludge volume capacity of the facility's solids handling process is not exceeded; and
  - (4) The facility's plant performance is not adversely impacted.
- b. Reporting. The Permittee shall submit a monthly log reporting the sources and amounts of the sludge pumped into the solids handling process during the calendar month. The log shall be submitted with the monthly DMRs.



- c. Retraction. The DOH reserves the right to retract the approval should the facility's treatment design capacity be exceeded, the effluent discharge monitoring results be in non-compliance with this permit, or the DOH deems necessary.

**I. REPORTING REQUIREMENTS**

1. Effluent Monitoring Program.

- a. Within 30 calendar days after the effective date of this permit, the Permittee shall submit an updated/revised Effluent Monitoring Program documenting that the analytical methods to be used are sufficiently sensitive. The Effluent Monitoring Program shall comply with Part A of this permit and be submitted to the DOH for review.
- b. The Program shall include at a minimum, but not be limited to, the following:
  - (1) Sampling location map;.
  - (2) Sample holding time;
  - (3) Preservation techniques;
  - (4) Test method and method detection level; and
  - (5) Quality control measures.

The DOH reserves the right to require the Permittee to revise the program, as appropriate, to ensure compliance with the terms and conditions of this permit.

- c. Monitoring shall be conducted according to test procedures approved under 40 CFR 136 with detection limits low enough to measure the compliance with Part A of this permit. For cases where the discharge limitation is below the Minimum Level of the appropriate test procedure, the compliance shall be based upon the Minimum Level of the method.

If a test method has not been promulgated for a particular constituent, the Permittee may use any suitable method for measuring the level of the constituent in the discharge provided the Permittee submits a description of the method or a reference to a published method.

2. Transmittal and Monitoring Results Reporting Requirements.

- a. Certification of Transmittals. The Permittee shall submit all information in accordance with HAR Section 11-55-07(b), with the following certification statement by an appropriate signatory:

**“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.”**

- b. Include “NPDES Permit No. **HI 0020877**” on each transmittal. Failure to provide the assigned permit number for this facility on future correspondence or transmittals may be a basis for delay of the processing of the document(s).
- c. Reporting of Discharge and Monitoring Results.
  - (1) All wastewater monitoring, and biosolids/sludge monitoring, sample preservation, and analyses shall be performed as described in the most recent edition of 40 CFR 136, unless otherwise specified in this permit. All receiving water monitoring, sample preservation, and analyses shall be performed as specified in this permit.
  - (2) In accordance with 40 CFR 122.45(c), effluent analyses for metals shall be reported as total recoverable.
  - (3) Monitoring results shall be reported on a DMR form (EPA No. 3320-1). The results of all monitoring required by this permit shall be submitted in a format which allows direct comparison with the limitations in Part A and other requirements of this permit.
  - (4) For the purposes of reporting, the Permittee shall use the reporting threshold equivalent to the laboratory’s method detection limit (MDL) and shall utilize a standard calibration where the lowest standard point is equal to or less than the concentration of the minimum level (ML).
    - (a) The Permittee shall report sample results and calculations at or above the laboratory’s ML on DMRs as the measured concentration or calculation.

- (b) The Permittee shall report sample results and calculations below the laboratory's MDL as NODI(B) on the DMR. NODI(B) means that the concentration of the pollutant in a sample is not detected.
  - (c) The Permittee shall report sample results and calculations between the ML and MDL as NODI(Q). NODI(Q) means that the concentration of the pollutant in a sample is detected but not quantified.
  - (d) For purposes of calculating averages, zero shall be assigned for values less than the MDL and the numeric value of the MDL shall be assigned for values between the MDL and the ML. The resulting average value shall be compared to the effluent limitation or the ML, whichever is greater, in assessing compliance.
  - (e) For purposes of calculated geometric means,  $0.25 \times \text{MDL}$  shall be assigned for values less than the MDL and the numeric value of the MDL shall be assigned for values between the MDL and the ML. The resulting geometric mean shall be compared to the effluent limitation or the ML, whichever is greater, in assessing compliance.
  - (f) When NODI(Q) or NODI(B) is reported for a parameter, the laboratory's numeric ML and MDL for that parameter shall also be noted on the DMR or on an attachment.
- (5) Should there be no discharges during the monitoring period, the DMR form shall so state.
- d. Additional Monitoring by the Permittee. If the Permittee monitors any pollutant at location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified in 40 CFR 136, the results of such monitoring shall be included in the calculation and reporting of the values required in the DMR form. The increased frequency shall also be indicated.
  - e. Submittal of Monitoring Results Using NetDMR. The Permittee shall submit DMRs required under this permit electronically using NetDMR. NetDMR is accessed from: <http://www.epa.gov/netdmr>.

DMRs shall be submitted electronically no later than the 28<sup>th</sup> day of the month following the completed reporting period. Once the Permittee begins submitting DMRs using NetDMR, the Permittee will no longer be required to submit hard copies of DMRs to the DOH, unless otherwise requested by

the DOH.

f. Schedule of Submission.

(1) The Permittee shall submit reports to the DOH as specified below.

Report	Reporting Period	Report Due Date
Local Limits Interim Progress Report	1/Permit Term	6 months after permit effective date
Local Limits Development Report	1/Permit Term	12 months after permit effective date
Sludge/Biosolids Annual Report	1/Year	February 19 <sup>th</sup> of each year
Pretreatment Annual Report	1/Year	March 31 <sup>st</sup> of each year
Receiving Water Monitoring Report	1/Year	June 30 <sup>th</sup> of each year
Wastewater Pollution Prevention Program Annual Report	1/Year	June 30 <sup>th</sup> of each year
Initial Investigation TRE Workplan	1/Permit Term	90 days after permit effective date

Signed copies of monitoring and all other reports required by this permit, except those described in Part I.2.e of this permit, shall be submitted to the DOH at the following address or as otherwise specified:

Director of Health  
Department of Health  
Environmental Management Division  
Clean Water Branch  
2827 Waimano Home Road, Room 225  
Pearl City, HI 96782

All reports, notifications, and updates to information on file shall be submitted through the CWB Compliance Submittal Form for Individual NPDES Permits and NGPCs or as specified by the DOH. This form is accessible through the e-Permitting Portal website at: <https://eha-cloud.doh.hawaii.gov/epermit>. If not already registered, a one-time registration is necessary to obtain a login and password. After registering, click on the Application Finder tool to locate the form. Follow the instructions to complete and submit this form. All submissions shall include a CD or DVD containing the downloaded e-Permitting submission and a completed Transmittal Requirements and Certification Statement for e-Permitting NPDES/NGPC Compliance Submissions Form, with original signature and date.

- (2) The Permittee shall submit reports to the DOH and EPA Region 9 Water Division's Monitoring and Assessment Office (WTR-2) as specified below.

Report	Reporting Period	Report Due Date
Shoreline Water Quality Monitoring	1/Month	28 <sup>th</sup> day of the month following completed reporting period
Offshore Water Quality Monitoring at HZ, HB2, HB3, HB4, and HB5	1/Quarter	28 <sup>th</sup> day following completed reporting period
Offshore Water Quality Monitoring at HB1, HB6, HB7, HM1, HM2, HM3, and HM4	1/Month	28 <sup>th</sup> day following completed reporting period
Offshore Sediment (chemistry and benthic organisms)	1/Year	June 30 <sup>th</sup> of each year
Fish Monitoring	1/Year	June 30 <sup>th</sup> of each year
Coral Reef Survey	1/Permit Term	Within 5 years of permit effective date

- (3) These reports shall be submitted to:

- (a) DOH-CWB using the CWB Compliance Submittal Form for Individual NPDES Permits and Notice of General Permit Coverages (NGPCs) via the e-Permitting Portal in accordance with Part I.2.f.(1) of this permit, unless otherwise specified by DOH.
- (b) EPA Region 9 Water Division's Monitoring and Assessment Office (WTR-2) via e-mail: [R9npdes@epa.gov](mailto:R9npdes@epa.gov).

3. Reporting of Noncompliance, Unanticipated Bypass, or Upset. The following requirements replace the 24-hour notice requirements for bypasses (Standard NPDES Conditions Section 17(d)(2)(B) and 40 CFR 122.41(1)(6)(ii)(A)) and upsets (Standard NPDES Conditions Section 18(c)(3) and 40 CFR 122.41(1)(6)(ii)(B)).

a. Immediate Reporting.

- (1) In the event of a bypass, upset, or sewage spill resulting in or contributing to a discharge to State waters, the Permittee shall orally notify the DOH at the time the Permittee's authorized personnel become aware of the circumstances, but no later than 24 hours after the event.

- (2) In the event of a bypass, upset, or sewage spill resulting in or contributing to a discharge of 1,000 gallons or more to State waters, the Permittee shall orally notify the DOH and the AP news wire services at the time the Permittee's authorized personnel become aware of the circumstances, but no later than 24 hours after the event.
- (3) In the event of an exceedance of a daily maximum discharge limitation, if any exist, the Permittee shall orally notify the DOH at the time the Permittee's authorized personnel becomes aware of the circumstances, but no later than 24 hours after the event.

b. Contact for Oral Reports.

- (1) The Permittee shall make oral reports during regular office hours (7:45 a.m. to 4:30 p.m.) to CWB at (808) 586-4309.
- (2) The Permittee shall make oral reports outside of regular office hours to the State Hospital Operator at (808) 247-2191.

c. Written Submission.

- (1) For those non-compliance events requiring immediate reporting, the Permittee shall also submit a written non-compliance report. The Permittee shall submit the report to CWB, at the address listed in Part I.2.f.(1) within five (5) working days after the Permittee's authorized personnel becomes aware of the noncompliance.
- (2) The report shall contain a description of the non-compliance and its cause; the period of non-compliance, including exact dates and times; if the non-compliance has not been corrected, the anticipated time it is expected to continue; public notice efforts, if any; clean-up efforts, if any; and steps taken or planned to reduce, eliminate and prevent reoccurrence of the non-compliance.
- (3) The DOH may waive the written report or the five (5) working day deadline on a case-by-case basis for spills, bypasses, upsets, and violations of daily maximum discharge limitations if the oral report has been received within 24 hours of the non-compliance or when the Permittee's authorized personnel becomes aware of the non-compliance.

- d. Other Non-Compliance. The Permittee shall report all other instances of non-compliance not reported under Part I.3.a at the time DMRs are submitted as required by Part I.2 of this permit. The non-compliance

reports shall contain the information requested in Part I.3.c.(2) of this permit.

4. Other Reporting Requirements. The Permittee shall comply with the reporting requirements of 40 CFR 122.41(l)(1) through 122.41(l)(5) and 122.41(l)(8) as incorporated by Standard NPDES Permit Conditions, Section 16. Parts I.1 and I.2 of this permit supersede the requirements of 40 CFR 122.41(l)(6) and 122.41(l)(7).
5. Types of Sample.
  - a. "Grab sample" means an individual sample collected at a randomly-selected time over a period not exceeding 15 minutes.
  - b. "Composite sample" means a combination of at least eight (8) sample aliquots, collected at periodic intervals during the operating hours of the facility over a 24-hour period. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.



**J. SPECIAL CONDITIONS**

1. Wastewater treatment facilities subject to this permit shall be supervised and operated by persons possessing certificates of appropriate grade, as determined by the DOH. If such personnel are not available to staff the wastewater treatment facilities, a program to promote such certification shall be developed and enacted by the Permittee. Activities of this program shall be reported in the Annual Report in Part F of this permit.
2. The Permittee shall maintain in good working order a sufficient alternate power source for operating the wastewater treatment and disposal facilities. All equipment shall be located to minimize failure due to moisture, liquid spray, flooding, and other physical phenomena. The alternate power source shall be designed to permit inspection and maintenance and shall provide for periodic testing. If such alternate power source is not in existence, the Permittee shall halt, reduce, or otherwise control all discharges upon the reduction, loss, or failure of the primary source of power.
3. This permit may be reopened and modified, in accordance with NPDES regulations at 40 CFR 122 and 124, as necessary, to include additional conditions or limitations based on newly available information.
4. From the effective date of this permit, the Permittee is required to commence all water quality sampling in accordance with the following:
  - a. Daily permit sampling frequency – Begin sampling the next calendar day.
  - b. Weekly and bi-weekly permit sampling frequency – Begin sampling the first complete calendar week.
  - c. Monthly and bi-monthly permit sampling frequency – Begin sampling the first complete calendar month.
  - d. Quarterly permit sampling frequency – Begin sampling the first complete calendar quarter.
  - e. Annual permit sampling frequency where the permit effective date is between January 1<sup>st</sup> and September 30<sup>th</sup>, inclusive – Begin sampling this calendar year.
  - f. Annual permit sampling frequency where the permit effective date is after September 30<sup>th</sup> – Begin sampling the next calendar year.

5. Monitoring required in this permit shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR Part 136 unless another method is required under 40 CFR Subchapters N or O.
6. Pollutant parameters with specific numerical limitations in this permit are authorized to be discharged only in accordance with the provisions of this permit. A discharge that exceeds a specific numerical limitation in this permit is a violation HRS Chapter 342D.
7. Pollutant parameters disclosed in the NPDES application for this facility are only authorized to be discharged in accordance with the State Water Quality Standards (WQS).
  - a. If the Permittee is not given an effluent limit this permit for a disclosed pollutant, the Permittee's discharge of this pollutant is still required to comply with applicable WQS. This permit is not a variance from WQS and does not absolve the Permittee from complying with WQS.
  - b. A discharge of a pollutant that was not disclosed in the NPDES application for this facility is an unauthorized discharge and a violation of HRS Chapter 342D. An unauthorized discharge occurs when a pollutant was not disclosed in the NPDES application for this facility but is detected by monitoring only requirements in this permit or by other means determined by the DOH.
8. Discharging effluent in a location that is not authorized in this permit is a violation of HRS Chapter 342D.
9. Failure to submit a DMR, report, and/or study by the due date specified in this permit is a violation of HRS Chapter 342D.
10. Failure to submit required monitoring data for a pollutant parameter in a DMR by the due date specified in this permit is a violation of HRS Chapter 342D and a permit effluent limit violation for that pollutant parameter.

0020877.FNL.20

**K. LOCATION AND ZOM AND RECEIVING WATER STATION MAPS**

(See Figures 1 and 2)

Attachment 2A-2

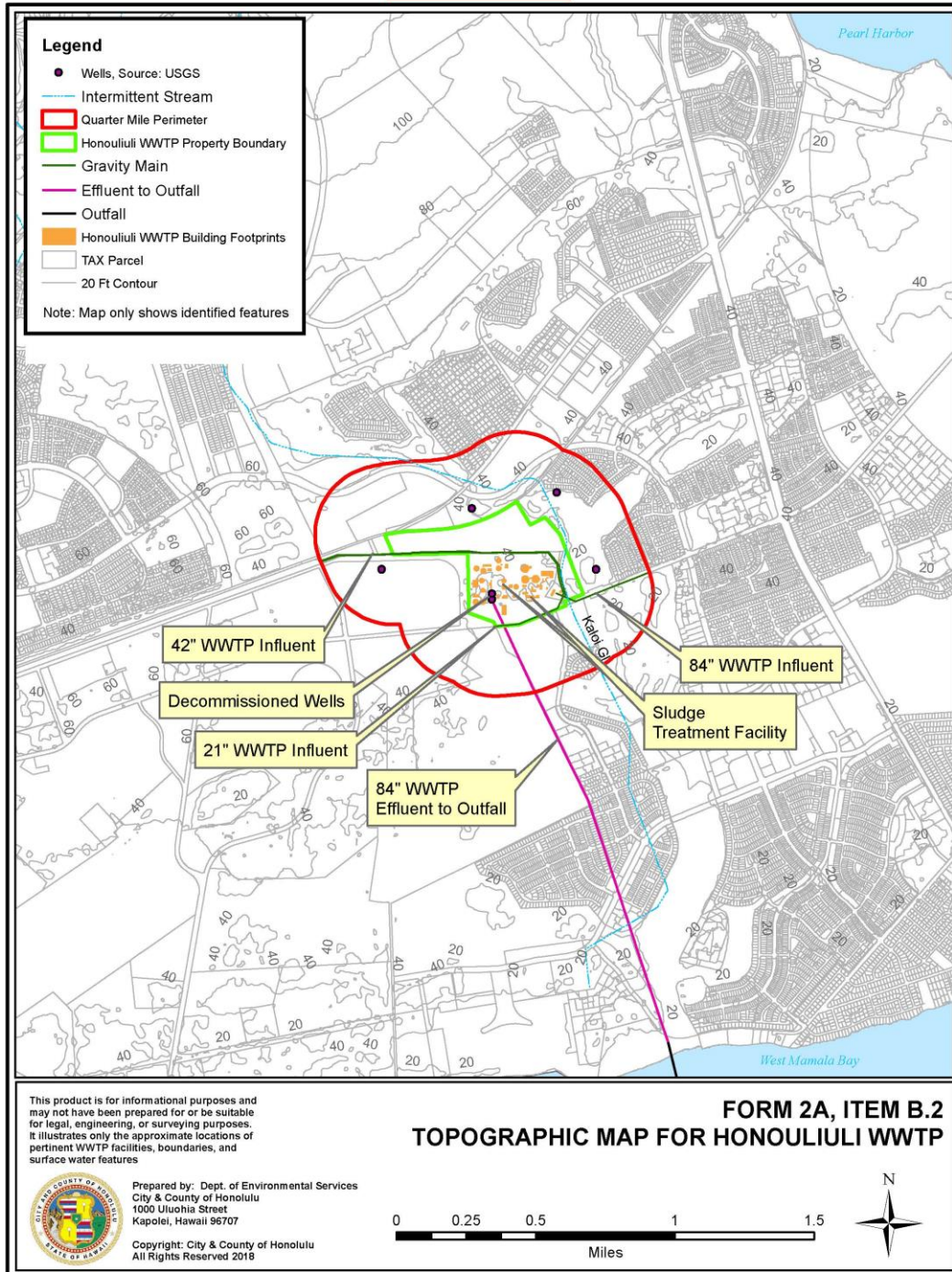
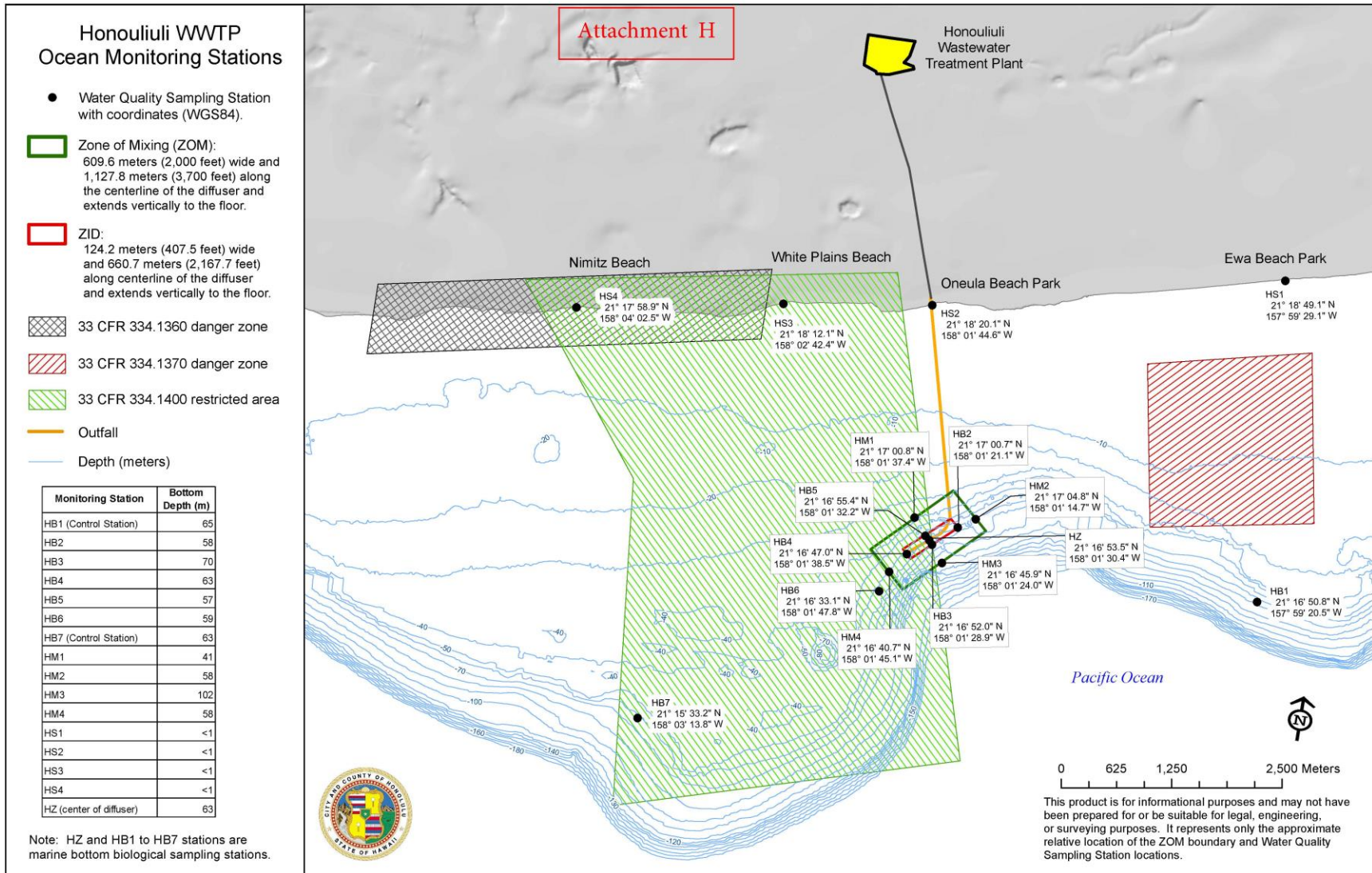


Figure 1 – Location Map

**PART K**  
**PERMIT NO. HI 0020877**  
**Page 53**



**Figure 2 – Zone of Mixing (ZOM), Zone of Initial Dilution (ZID), and Receiving Water Monitoring Locations**



**APPENDIX 1 – MONITORING PARAMETERS AND ANALYTICAL METHODS**

<b>Discharge Parameter</b>	<b>Sample Type</b>	<b>Analytical Method</b>	<b>Chemical Abstract No.</b>
<b><i>Metals</i></b>			
Antimony	24-Hr Composite or Grab	As specified in 40 CFR 136	7440-36-0
Arsenic	24-Hr Composite or Grab	As specified in 40 CFR 136	7440-38-2
Beryllium	24-Hr Composite or Grab	As specified in 40 CFR 136	7440-41-7
Cadmium	24-Hr Composite or Grab	As specified in 40 CFR 136	7440-43-9
Chromium (VI)	24-Hr Composite or Grab	As specified in 40 CFR 136	18540-29-9
Copper	24-Hr Composite or Grab	As specified in 40 CFR 136	7440-50-8
Lead	24-Hr Composite or Grab	As specified in 40 CFR 136	7439-92-1
Mercury	24-Hr Composite or Grab	As specified in 40 CFR 136	7439-97-6
Nickel	24-Hr Composite or Grab	As specified in 40 CFR 136	7440-02-0
Selenium	24-Hr Composite or Grab	As specified in 40 CFR 136	7782-49-2
Silver	24-Hr Composite or Grab	As specified in 40 CFR 136	7440-22-4
Thallium	24-Hr Composite or Grab	As specified in 40 CFR 136	7440-28-0
Zinc	24-Hr Composite or Grab	As specified in 40 CFR 136	7440-66-6
<b><i>Pesticides</i></b>			
Aldrin	24-Hr Composite or Grab	As specified in 40 CFR 136	309-00-2
Chlordane	24-Hr Composite or Grab	As specified in 40 CFR 136	12789-03-6
Dieldrin	24-Hr Composite or Grab	As specified in 40 CFR 136	60-57-1
4,4'-DDT	24-Hr Composite or Grab	As specified in 40 CFR 136	50-29-3
4,4'-DDE	24-Hr Composite or Grab	As specified in 40 CFR 136	72-55-9
4,4'-DDD	24-Hr Composite or Grab	As specified in 40 CFR 136	72-54-8
Alpha-Endosulfan	24-Hr Composite or Grab	As specified in 40 CFR 136	959-98-8
Beta Endosulfan	24-Hr Composite or Grab	As specified in 40 CFR 136	33213-65-9
Endosulfan Sulfate	24-Hr Composite or Grab	As specified in 40 CFR 136	1031-07-8
Endrin	24-Hr Composite or Grab	As specified in 40 CFR 136	72-20-8
Endrin Aldehyde	24-Hr Composite or Grab	As specified in 40 CFR 136	7421-93-4
Heptachlor	24-Hr Composite or Grab	As specified in 40 CFR 136	76-44-8
Heptachlor Epoxide	24-Hr Composite or Grab	As specified in 40 CFR 136	1024-57-3
Alpha BHC	24-Hr Composite or Grab	As specified in 40 CFR 136	319-84-6
Beta BHC	24-Hr Composite or Grab	As specified in 40 CFR 136	319-85-7
Delta BHC	24-Hr Composite or Grab	As specified in 40 CFR 136	319-86-8
Gamma BHC (Lindane)	24-Hr Composite or Grab	As specified in 40 CFR 136	58-89-9
Toxaphene	24-Hr Composite or Grab	As specified in 40 CFR 136	8001-35-2
PCB 1016	24-Hr Composite or Grab	As specified in 40 CFR 136	12674-11-2
PCB 1221	24-Hr Composite or Grab	As specified in 40 CFR 136	11104-28-2
PCB 1232	24-Hr Composite or Grab	As specified in 40 CFR 136	11141-16-5
PCB 1242	24-Hr Composite or Grab	As specified in 40 CFR 136	53469-21-9
PCB 1248	24-Hr Composite or Grab	As specified in 40 CFR 136	12672-29-6
PCB 1254	24-Hr Composite or Grab	As specified in 40 CFR 136	11097-69-1
PCB 1260	24-Hr Composite or Grab	As specified in 40 CFR 136	11096-82-5
<b><i>Base/Neutral Extractables</i></b>			
Acenaphthene	24-Hr Composite or Grab	As specified in 40 CFR 136	83-32-9
Acenaphthylene	24-Hr Composite or Grab	As specified in 40 CFR 136	208-96-8
Anthracene	24-Hr Composite or Grab	As specified in 40 CFR 136	120-12-7
Benzidine	24-Hr Composite or Grab	As specified in 40 CFR 136	92-87-5
Benzo(a)Anthracene	24-Hr Composite or Grab	As specified in 40 CFR 136	56-55-3
Benzo(a)Pyrene	24-Hr Composite or Grab	As specified in 40 CFR 136	50-32-8
Benzo(b)Fluoranthene	24-Hr Composite or Grab	As specified in 40 CFR 136	205-99-2

<b>Discharge Parameter</b>	<b>Sample Type</b>	<b>Analytical Method</b>	<b>Chemical Abstract No.</b>
Benzo(g,h,i)Perylene	24-Hr Composite or Grab	As specified in 40 CFR 136	191-24-2
Benzo(k)Fluoranthene	24-Hr Composite or Grab	As specified in 40 CFR 136	207-08-9
Bis(2-Chloroethoxy)Methane	24-Hr Composite or Grab	As specified in 40 CFR 136	111-91-1
Bis(2-Chloroethyl)Ether	24-Hr Composite or Grab	As specified in 40 CFR 136	111-44-4
Bis(2-Chloroisopropyl)Ether	24-Hr Composite or Grab	As specified in 40 CFR 136	39638-32-9
Bis(2-Ethylhexyl)Phthalate	24-Hr Composite or Grab	As specified in 40 CFR 136	117-81-7
4-Bromophenyl Phenyl Ether	24-Hr Composite or Grab	As specified in 40 CFR 136	101-55-3
Butyl Benzyl Phthalate	24-Hr Composite or Grab	As specified in 40 CFR 136	85-68-7
2-Chloronaphthalene	24-Hr Composite or Grab	As specified in 40 CFR 136	91-58-7
Chrysene	24-Hr Composite or Grab	As specified in 40 CFR 136	218-01-9
Dibenzo(a,h)Anthracene	24-Hr Composite or Grab	As specified in 40 CFR 136	53-70-3
4-Chlorophenyl Phenyl Ether	24-Hr Composite or Grab	As specified in 40 CFR 136	7005-72-3
3,3-Dichlorobenzidine	24-Hr Composite or Grab	As specified in 40 CFR 136	91-94-1
Diethyl Phthalate	24-Hr Composite or Grab	As specified in 40 CFR 136	84-66-2
Dimethyl Phthalate	24-Hr Composite or Grab	As specified in 40 CFR 136	131-11-3
Di-N-Butyl Phthalate	24-Hr Composite or Grab	As specified in 40 CFR 136	84-74-2
2,4-Dinitrotoluene	24-Hr Composite or Grab	As specified in 40 CFR 136	121-14-2
2,6-Dinitrotoluene	24-Hr Composite or Grab	As specified in 40 CFR 136	606-20-2
1,2-Diphenylhydrazine (as Azobenzene)	24-Hr Composite or Grab	As specified in 40 CFR 136	122-66-7
Di-N-Octyl Phthalate	24-Hr Composite or Grab	As specified in 40 CFR 136	117-84-0
Fluoranthene	24-Hr Composite or Grab	As specified in 40 CFR 136	206-44-0
Fluorene	24-Hr Composite or Grab	As specified in 40 CFR 136	86-73-7
Hexachlorobenzene	24-Hr Composite or Grab	As specified in 40 CFR 136	118-74-1
Hexachlorobutadiene	24-Hr Composite or Grab	As specified in 40 CFR 136	87-68-3
Hexachlorocyclopentadiene	24-Hr Composite or Grab	As specified in 40 CFR 136	77-47-4
Hexachloroethane	24-Hr Composite or Grab	As specified in 40 CFR 136	67-72-1
Indeno(1,2,3-cd)Pyrene	24-Hr Composite or Grab	As specified in 40 CFR 136	193-39-5
Isophorone	24-Hr Composite or Grab	As specified in 40 CFR 136	78-59-1
Naphthalene	24-Hr Composite or Grab	As specified in 40 CFR 136	91-20-3
Nitrobenzene	24-Hr Composite or Grab	As specified in 40 CFR 136	98-95-3
N-Nitrosodimethylamine	24-Hr Composite or Grab	As specified in 40 CFR 136	62-75-9
N-Nitrosodi-N-Propylamine	24-Hr Composite or Grab	As specified in 40 CFR 136	621-64-7
N-Nitrosodiphenylamine	24-Hr Composite or Grab	As specified in 40 CFR 136	86-30-6
Phenanthrene	24-Hr Composite or Grab	As specified in 40 CFR 136	85-01-8
Pyrene	24-Hr Composite or Grab	As specified in 40 CFR 136	129-00-0
1,2,4-Trichlorobenzene	24-Hr Composite or Grab	As specified in 40 CFR 136	120-82-1
<b><i>Acid Extractables</i></b>			
2-Chlorophenol	24-Hr Composite or Grab	As specified in 40 CFR 136	95-57-8
2,4-Dichlorophenol	24-Hr Composite or Grab	As specified in 40 CFR 136	120-83-2
2,4-Dimethylphenol	24-Hr Composite or Grab	As specified in 40 CFR 136	105-67-9
4,6-Dintro-O-Cresol	24-Hr Composite or Grab	As specified in 40 CFR 136	534-52-1
2,4-Dinitrophenol	24-Hr Composite or Grab	As specified in 40 CFR 136	51-28-5
2-Nitrophenol	24-Hr Composite or Grab	As specified in 40 CFR 136	88-75-5
4-Nitrophenol	24-Hr Composite or Grab	As specified in 40 CFR 136	100-02-7
P-Chloro-M-Cresol	24-Hr Composite or Grab	As specified in 40 CFR 136	59-50-7
Pentachlorophenol	24-Hr Composite or Grab	As specified in 40 CFR 136	87-86-5
Phenol	24-Hr Composite or Grab	As specified in 40 CFR 136	108-95-2
2,4,6-Trichlorophenol	24-Hr Composite or Grab	As specified in 40 CFR 136	88-06-2

Discharge Parameter	Sample Type	Analytical Method	Chemical Abstract No.
<b><i>Volatile Organics</i></b>			
Acrolein	Grab	As specified in 40 CFR 136	107-02-8
Acrylonitrile	Grab	As specified in 40 CFR 136	107-13-1
Benzene	Grab	As specified in 40 CFR 136	71-43-2
Bromoform	Grab	As specified in 40 CFR 136	75-25-2
Carbon Tetrachloride	Grab	As specified in 40 CFR 136	56-23-5
Chlorobenzene	Grab	As specified in 40 CFR 136	108-90-7
Chlorodibromomethane	Grab	As specified in 40 CFR 136	124-48-1
Chloroethane	Grab	As specified in 40 CFR 136	75-00-3
2-Chloroethyl Vinyl Ether	Grab	As specified in 40 CFR 136	110-75-8
Chloroform	Grab	As specified in 40 CFR 136	67-66-3
Dichlorobromomethane	Grab	As specified in 40 CFR 136	75-27-4
1,2-Dichlorobenzene	24-Hr Composite or Grab	As specified in 40 CFR 136	95-50-1
1,3-Dichlorobenzene	24-Hr Composite or Grab	As specified in 40 CFR 136	541-73-1
1,4-Dichlorobenzene	24-Hr Composite or Grab	As specified in 40 CFR 136	106-46-7
1,1-Dichloroethane	Grab	As specified in 40 CFR 136	75-34-3
1,2-Dichloroethane	Grab	As specified in 40 CFR 136	107-06-2
1,1-Dichloroethylene	Grab	As specified in 40 CFR 136	75-35-4
1,2-Dichloropropane	Grab	As specified in 40 CFR 136	78-87-5
1,3-Dichloropropylene	Grab	As specified in 40 CFR 136	542-75-6
Ethylbenzene	Grab	As specified in 40 CFR 136	100-41-4
Methyl Bromide	Grab	As specified in 40 CFR 136	74-83-9
Methyl Chloride	Grab	As specified in 40 CFR 136	74-87-3
Methylene Chloride	Grab	As specified in 40 CFR 136	75-09-2
1,1,2,2-Tetrachloroethane	Grab	As specified in 40 CFR 136	79-34-5
Tetrachloroethylene	Grab	As specified in 40 CFR 136	127-18-4
Toluene	Grab	As specified in 40 CFR 136	108-88-3
1,2-Trans-Dichloroethylene	Grab	As specified in 40 CFR 136	156-60-5
1,1,1-Trichloroethane	Grab	As specified in 40 CFR 136	71-55-6
1,1,2-Trichloroethane	Grab	As specified in 40 CFR 136	79-00-5
Trichloroethylene	Grab	As specified in 40 CFR 136	79-01-6
Vinyl Chloride	Grab	As specified in 40 CFR 136	75-01-4
<b><i>Miscellaneous</i></b>			
Cyanide	24-Hr Composite or Grab	As specified in 40 CFR 136	57-12-5
Asbestos (Not required unless otherwise specified)	24-Hr Composite or Grab	As specified in 40 CFR 136	1332-21-4
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (TCDD)	24-Hr Composite or Grab	As specified in 40 CFR 136	1746-01-6
<b><i>Other Pesticides</i></b>			
Demeton	24-Hr Composite or Grab	As specified in 40 CFR 136	8065-48-3
Guthion	24-Hr Composite or Grab	As specified in 40 CFR 136	86-50-0
Parathion	24-Hr Composite or Grab	As specified in 40 CFR 136	56-38-2
Malathion	24-Hr Composite or Grab	As specified in 40 CFR 136	121-75-5
Mirex	24-Hr Composite or Grab	As specified in 40 CFR 136	2385-85-5
Methoxychlor	24-Hr Composite or Grab	As specified in 40 CFR 136	72-43-5